

IN THE CLAIMS

Please cancel claims 30-34 without disclaimer or prejudice to be pursued in this or a later-filed continuation or continuation-in-part application.

Please add the following new claims.

1-34. (canceled)

35. (new) An apparatus comprising:
a first information receiving apparatus having a first group address,
a second information receiving apparatus having a second group address, and
an information transmitting apparatus in communication with the first and second information receiving apparatus via a network, the information transmitting apparatus and being arranged and constructed to (1) transmit via the network two or more blocks of data subdivided from a designated information together with the first group address for the first information receiving apparatus in response to receiving a request to transmit the designated information from the first information receiving apparatus, (2) transmit via the network one or more blocks of data that have not yet been transmitted to the first information receiving apparatus with the first group address and the second group address for the second information receiving apparatus, in response to receiving a request to transmit the designated information from the second information receiving apparatus prior to transmitting all blocks of data, which contain the designated information, to the first information receiving apparatus, and (3) transmit via the network one or more blocks of data already transmitted to the first information receiving apparatus with the second group address, wherein the first and second information receiving apparatus are further arranged and constructed to send the request to transmit the designated information to the information transmitting apparatus,

receive blocks of data via the network, wherein the group address of the received blocks of data are identical to the respective group addresses, and store the received blocks of data in a storage device,

wherein the information transmitting apparatus is arranged and constructed to cyclically transmit the blocks of data subdivided from the designated information apparatus in a predetermined sequence, when the information transmitting apparatus receives another request to transmit the designated information from another information receiving apparatus prior to transmitting all blocks of data subdivided from the designated information.

36. (new) An apparatus according to claim 35, wherein the first information receiving apparatus is arranged and constructed to transmit a request to retransmit a block of data to the information transmitting apparatus, and the information transmitting apparatus is arranged and constructed to retransmit the requested block of data to the first information receiving apparatus upon receiving the request to retransmit request, the first information receiving apparatus being further arranged and constructed to receive and store the retransmitted block of data from the information transmitting apparatus.

37. (new) An apparatus according to claim 36, wherein the information transmitting apparatus is further arranged and constructed to evaluate the bandwidth utilization status of the network based upon a comparison of a limit value and the number of blocks of data requested to be retransmitted.

38. (new) An apparatus comprising:
a first information receiving apparatus having a first group address,
a second information receiving apparatus having a second group address, and
an information transmitting apparatus in communication with the first and second
information receiving apparatus via a network, the information transmitting apparatus
and being arranged and constructed to (1) transmit via the network two or more blocks
of data subdivided from a designated information together with the first group address
for the first information receiving apparatus in response to receiving a request to
transmit the designated information from the first information receiving apparatus,
(2) transmit via the network one or more blocks of data that have not yet been
transmitted to the first information receiving apparatus with the first group address and
the second group address for the second information receiving apparatus, in response
to receiving a request to transmit the designated information from the second
information receiving apparatus prior to transmitting all blocks of data, which contain the
designated information, to the first information receiving apparatus, and (3) transmit via
the network one or more blocks of data already transmitted to the first information
receiving apparatus with the second group address,

wherein the information transmitting apparatus is arranged and constructed to
cyclically transmit the blocks of data subdivided from the designated information
apparatus in a predetermined sequence, when the information transmitting apparatus
receives another request to transmit the designated information from another
information receiving apparatus prior to transmitting all blocks of data subdivided from
the designated information; and

wherein each of the first and second information receiving apparatus is further
arranged and constructed to receive the blocks of data subdivided from the designated
information, based on the total number of the blocks.

39. (new) An apparatus according to claim 38, wherein when the information transmitting apparatus receives the information transmitting request from the first or second information receiving apparatus, the information transmitting apparatus transmits the number of the blocks of data subdivided from the designated information to the first or second information receiving apparatus that has transmitted the information transmitting request.

40. (new) An apparatus according to claim 38, wherein the information transmitting apparatus is further arranged and constructed to transmit a subdivision sequence information of each block of data, and each of the first and second information receiving apparatus receives the blocks of data according to the subdivision sequence information.